

ABSTRACT

A charge-neutral organometallic dendrimer is described, said dendrimer having the formula (I):



in which CORE represents a group of formula  $\text{MX}_x\text{Y}_z$ , in which M represents a metal cation, x represents an integer of 1 or more, each X which may be the same or different represents a mono-, bi- or tri-dentate coordinating group, z represents 0 or an integer of 1 or more, and each Y which may be the same or different represents a coordinating group, the total of  $(b.x) + (c.z)$  being equal to the number of coordination sites on M, wherein b is the number of coordination sites on X and c is the number of coordination sites on Y; n represents an integer of 2 or more; each DENDRITE which may be the same or different represents a dendritic molecular structure bonded to a group X; a represents 0 or an integer of 1 or more; and each Q which may be the same or different represents a surface group; CORE terminating in the first single bond which is connected to a branching group or branching atom of DENDRITE; which dendrimer has a structure in which no hemisphere of a notional sphere centred on M and containing the dendrimer is devoid of a said first single bond.